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08/990,973	•	12/15/1997	ELIZABETH A. SMITH	01263.59651	1916	
5642	7590	12/28/2005		EXAM	EXAMINER	
		ANTA, INC.	SALCE, JASON P			
	INTELLECTUAL PROPERTY DEPARTMENT 5030 SUGARLOAF PARKWAY			ART UNIT	PAPER NUMBER	
LAWRENC	EVILLE	, GA 30044	4 2614			
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Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		08/990,973	SMITH ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Jason P. Salce	2614			
	The MAILING DATE of this communication app					
Period fo	or Reply					
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE in a soft ime may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timulated apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. sely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 27 Se	eptember 2005.				
	This action is FINAL . 2b) This action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	33 O.G. 213.			
Disposit	ion of Claims					
5)□ 6)⊠ 7)□	Claim(s) <u>27-54</u> is/are pending in the application 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) <u>27-54</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	on Papers					
10)	The specification is objected to by the Examiner The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correcti The oath or declaration is objected to by the Example.	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority (ınder 35 U.S.C. § 119					
12) [a)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prioric application from the International Bureau See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No In this National Stage			
Attachmen	• •					
2) D Notic 3) D Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:				

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 27-54 have been considered but are most in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh (U.S. Patent 4,829,558) in view of Reiter et al. (U.S. Patent 4,751,578) in further view of Boulton (U.S. Patent No. 4,985,697).

Referring to claim 27, Welsh discloses receiving a first user input at a subscriber terminal indicating a choice for first operation data, wherein the first operation data includes a plurality of screens (see Column 10, Lines 3-9 for selecting a screen (first operation data) for display).

Welsh also discloses displaying the first operation data according to the user input (see Column 10, Lines 9-13 for writing the selected screen to the display), wherein the first operation data is stored at the subscriber terminal (see Column 10, Line 11 for the screen data being written to RAM 51).

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Welsh also discloses generating a screen of first operation data responsive to a command at Column 9, Lines 3-9 for a video display generator 55 used to display a screen and Column 8, Lines 20-23 for selecting between a standard broadcast television signal and screens.

Welsh also discloses that the screen of operation data is generated by a local screen character generator at Column 6, Lines 60-66 and Figure 2 for the video display generator 55 (which receives data from the video RAM 62) being a component in the home (see also Column 5, Lines 57-59).

Welsh also discloses that the first operation data is stored in at least one of a screen generator coupled to the system manager and subscriber terminal memory.

Note that at Column 9, Lines 58-61, Welsh discloses that RAM 51 can store up to 600 screens and also at Column 9, Lines 3-4, the local screen generator (video display generator 55) also stores the present screen in RAM 62.

Welsh fails to disclose displaying the video signal and the screen of the first operation data according to the user input, therefore having the functionality of overlaying the operation data onto the video signal.

Reiter discloses overlaying operation data onto a video signal for display to a user (see Column 2, Lines 25-29).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the television display, as taught by Welsh, using the overlay technology, as taught by Reiter, for the purpose of allowing a viewer to continue

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to view the television program he is currently watching, while overlaying the data of interest to the viewer on the television display (see Column 6, Lines 29-38 of Reiter).

Welsh further discloses saving a screen of the plurality of screens to memory (see Column 10, Lines 3-5 for storing a screen in memory).

Welsh further discloses determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens (see Column 10, Lines 19-21 for determining to display other screens that are accessible from another screen according to the responses entered by the viewer).

Welsh also discloses that if the screen of the plurality of screens is saved into memory is only accessible through other screens, then indicating to access the other screen and display the screen on the television (see again Column 10, 19-21 for displaying other screens after a previous screen is displayed).

Welsh however does not teach the memory management method of determining if a screen is part of a group of screens, and only saving the group of screens in RAM so that they may be directly accessed instead of continuously downloading the screens from a remote system.

Boulton discloses receiving screen data and continuously updating the memory depending on the position of the current page being read, where the memory is capable of storing 10-30 pages that are linked to 3-10 pages that have already been viewed (see Column 7, Lines 8-12), thereby teaching that if the screen of the plurality of screens saved into memory is only accessible through

other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is <u>not</u> to be deleted from memory.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the functionality of storing screens to RAM, as taught by Welsh and Reiter, using the memory management functionality, as taught by Boulton, for the purpose of providing the user with rapid access to any one of the modality streams without incurring delays, while maximizing the amount of information immediately available in the current modality stream (see Column 8, Lines 14-18 of Boulton).

Referring to claim 28, Welsh discloses storing all screens in RAM 51 and that responding to each screen causes the microprocessor 43 to search for the next screen (see Column 10, Lines 65-67 and Column 11, Lines 1-2 and also note that the first screen in the series of screens is inherently the "feature start screen" and all screens after that are the "associated screens"). Welsh also teaches that the user selects the screen or screens to be displayed (see Column 10, Lines 3-5) and that the screens are sent from the system manager (central computer 25) and stored prior to their actual use (see Column 9, Lines 58-61 for the RAM 51 being capable of holding up to 600 screens and Column 9, Lines 43-45 for sending the screen data all at once).

Referring to claim 29, Welsh discloses receiving a second user input for one of the associated screen according to a channel map (RAM 51, which discloses the

locations of all the screens) associated with the first operation data (see again Column 10, Lines 66-67 and Column 11, Lines 1-2 for receiving multiple inputs, where each input is requesting the next screen).

Welsh also discloses transmitting the second user input to the system manager (see Column 9, Lines 34-37 for transmitting further screen data depending upon the requirements of the questionnaire being completed).

Welsh also discloses receiving information from the system manager for updating the associated screen (see Column 9, Lines 42-45 for sending the data to the terminal and Column 9, Lines 43-52 for storing the screens in RAM).

Welsh also discloses displaying the associated screen including the updated information in accordance with the second user input (see Column 10, Lines 3-5 for displaying a stored screen and Column 10, Lines 66-67 and Column 11, Lines 1-2 for displaying a next screen according to the next user input).

Referring to claim 30, Welsh see rejection of claim 29.

Referring to claim 31, see rejection of claims 27-28 and note that data can also be stored at the system manager (central computer 25) (see Column 12, Lines 65-66). Further note that the claim recites "the system manager is further configured to indicate that the screen". The examiner notes that this limitation is broad, and that transmitting the screens to the viewer's terminal and applying the memory management method of Boulton clearly provides an indication to not delete the screen from memory.

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Referring to claim 32, see rejection of claim 29.

3. Claims 33, 39-40, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh (U.S. Patent No. 4,829,558) in view of Kirschner et al. (U.S. Patent No. 4,253,157) in further view of Boulton (U.S. Patent No. 4,985,697).

Referring to claim 33, Welsh discloses generating at the premises of a subscriber a screen for selecting services (see Column 4, Lines 53-56 for generating (at an FM station) and displaying (on a television) screens and Column 4, Lines 42-46 for the system providing home shopping services), wherein the screen is one of a plurality of screens (see Column 10, Lines 66-67 and Column 11, Lines 1-2), and wherein the services for selection are offered by an interactive entertainment system (see FM broadcast station 5 in Figure 1, which provides the screen data to the terminals at Column 4, Lines 53-56). The examiner notes that since the FM broadcast station 5 in Figure 1 is sending the interactive screens (users can respond to the screens) to the users in there homes, the FM broadcast station 5 is therefore, an interactive entertainment system. Also note Column 9, Lines 34-37 for the central computer 25 recording responses from the guest and sending additional screen data if needed, therefore the subscriber can also offer additional services.

Welsh also discloses providing a terminal (see Figures 2-3), the terminal adapted to receiver input from a guest and adapted to provide the screen to a display device (see Column 5, Lines 26-30 for receiving input from a guest and Column 10, Lines 3-15 for the video display generator 55 displaying the screen to the display).

Welsh also discloses receiving a selection from a guest (see Column 9, Lines 20-24).

Although Welsh discloses home shopping services and receiving screens to allow users to make selections and that the subscriber responds to a questionnaire at Column 11, Lines 5-25, which is used by the central computer, thereby providing the service of a viewer response system in response to the screen, which relates to information about services (response system) provided by the subscriber (by answering the questions), Welsh fails to specifically disclose a menu for selecting services from an interactive system.

Kirschner discloses that screens can contain menus for selecting from different interactive services (see Column 5, Lines 10-64 for examples of two such menus).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the screens of Welsh, utilizing the menus of Kirschner for the purpose of providing an organized selection system for the user to access the proper services in a more efficient manner.

Welsh further discloses saving a screen of the plurality of screens to memory (see Column 10, Lines 3-5 for storing a screen in memory).

Welsh further discloses determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens (see Column 10, Lines 19-21 for determining to display other screens that are accessible from another screen according to the responses entered by the viewer).

Welsh also discloses that if the screen of the plurality of screens is saved into memory is only accessible through other screens, then indicating to access the other screen and display the screen on the television (see again Column 10, 19-21 for displaying other screens after a previous screen is displayed).

Welsh however does not teach the memory management method of determining if a screen is part of a group of screens, and only saving the group of screens in RAM so that they may be directly accessed instead of continuously downloading the screens from a remote system.

Boulton discloses receiving screen data and continuously updating the memory depending on the position of the current page being read, where the memory is capable of storing 10-30 pages that are linked to 3-10 pages that have already been viewed (see Column 7, Lines 8-12), thereby teaching that if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the functionality of storing screens to RAM, as taught by Welsh and Reiter, using the memory management functionality, as taught by Boulton, for the purpose of providing the user with rapid access to any one of the modality streams without incurring delays, while maximizing the amount of information immediately available in the current modality stream (see Column 8, Lines 14-18 of Boulton).

Claim 39 corresponds to claim 33, where Welsh discloses that screens are generated by a video display generator 55 in Figure 3 (also note Column 9, Lines 3-9).

Claim 40 corresponds to claim 33, where Welsh discloses associating a given screen of the menu with a given television channel (see Column 10, Lines 28-38 and note that Kirschner is used to teach a menu screen). Note that the FM receiver 33 "tunes" to a given frequency transmitted over the television network, therefore if a screen is displayed, it is supplied from a specific television channel frequency.

Welsh also discloses outputting the given screen from the terminal such that the screen is displayable on a television tuned to the given television channel (see Column 10, Lines 62-64).

Referring to claim 43, see rejection of claim 33 where both Welsh and Kirschner disclose offering services by the subscriber. The examiner notes that the subscriber responds to a questionnaire at Column 11, Lines 5-25, which is used by the central computer. Therefore the subscriber provides the service of a viewer response system in response to the screen, which relates to information about services (response system) provided by the subscriber (by answering the questions).

4. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh (U.S. Patent No. 4,829,558) in view of Kirschner et al. (U.S. Patent No. 4,253,157) in

further view of Boulton (U.S. Patent No. 4,985,697) in further view of Reiter (U.S. Patent No. 4,751,578).

Claim 46 corresponds to claim 33, where Welsh teaches the additional limitations of receiving a video signal (see Column 5, Lines 4-7), outputting the video signal such that the video signal is displayable on a television (see Column 8, Lines 20-24), and outputting the screen such that the screen is displayable on a television (see Column 8, Lines 20-24).

However, Welsh, Kirschner and Boulton fail to teach the additional limitation of superimposing the screen over the video signal.

Reiter discloses overlaying operation data onto a video signal for display to a user (see Column 2, Lines 25-29).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the television display, as taught by Welsh, Kirschner and Boulton, using the overlay technology, as taught by Reiter, for the purpose of allowing a viewer to continue to view the television program he is currently watching, while overlaying the data of interest to the viewer on the television display (see Column 6, Lines 29-38 of Reiter).

5. Claims 34-36, 38, 41, 44-45 and 47-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh (U.S. Patent No. 4,829,558) in view of Kirschner et al. (U.S. Patent No. 4,253,157) in further view of Boulton (U.S. Patent No. 4,985,697) in further view of Iwashita (U.S. Patent No. 4,928,168).

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Referring to claim 34, Welsh, Kirschner and Boulton disclose all of the limitations in claim 33, but fail to disclose a screen that includes charges owed by the guest.

Iwashita discloses a screen that displays the charges owed by a guest (see Figure 3).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the one of the screens presented to the guest, as taught by Welsh, Kirschner and Boulton, using the charges owed screen in Figure 3 of lwashita, for the purpose of providing proper payment information to the user before he/she checks out of the hotel, therefore providing a convenient service to the guest (see Column 5, Lines 52-57 of lwashita).

Claim 35 corresponds to claim 34, where Iwashita also teaches the additional limitation of the charges include charges for services offered by the interactive entertainment system (note in Figure 3 and Column 5, Lines 52-57 disclose that charges include a bill for pay television programs that have been viewed).

Claim 36 corresponds to claim 34, where Iwashita also teaches the additional limitation of the subscriber providing room service to guests, and the charges include charges for room services (note that the pay television channels are provided to a guest at a subscriber location (his/her room), therefore see the rejection of claim 35).

Claim 38 corresponds to claim 33, where Kirschner, Welsh and Boulton teach transmitting the screen downstream through a local area network to the terminal (see Column 4, Lines 53-59 of Welsh and Column 4, Lines 62-64 of Kirschner). Kirschner, Welsh and Boulton also teach a system manager (see element 25 in Figure 1 of Welsh and element 20 in Figure 1 of Kirschner), but fail to disclose that the system manager is

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located at the premises of the subscriber and adapted to control billing of the guest. Iwashita discloses a central computer 3 (in a hotel system, which is therefore at the subscriber's premises) used to control billing of the guest (see Column 5, Lines 13-65 and Figure 3).

At the time the invention was made, it would have been obvious of ordinary skill in the art to modify the system of Welsh, Kirschner and Boulton, using the system manager (central computer 3) in Figure 1 that controls billing of a guest, as taught by lwashita, for the purpose of providing proper payment information to the user before he/she checks out of the hotel, therefore providing a convenient service to the guest (see Column 5, Lines 52-57 of lwashita).

Referring to claims 41, see rejection of claim 36.

Referring to claim 44, see rejection of claim 33 and 38, and also note that Welsh discloses retrieving additional (second, third or fourth, etc.) screen data from the central computer 25 (see Column 9, Lines 34-37 and Column 10, Lines 66-67 and Column 11, Lines 1-2). Also note that at Column 9, Lines 60-61 screens are only stored when necessary.

Claim 45 corresponds to claim 44, see rejection of claim 44 and again note that Welsh discloses that the central computer 25 can send additional data upon reading responses from the guest (see Column 9, Lines 34-37). Also note Column 12, Lines 4-8 for transmitting up to date screen data.

Referring to claim 47, see rejection of claim 33, 38 and 43.

Referring to claim 48, see rejection of claim 39.

Referring to claims 49-50, see the rejection of claims 44 and 45 for Welsh disclosing accessing additional screen.

Referring to claims 51-52, see rejection of claims 36-37, respectively.

6. Claims 37 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh (U.S. Patent No. 4,829,558) in view of Kirschner et al. (U.S. Patent No. 4,253,157) in further view of Boulton (U.S. Patent No. 4,985,697) in further view of Couch et al. (U.S. Patent No. 4,752,876).

Claim 37 corresponds to claim 33, where Kirschner, Welsh and Boulton fail to specifically disclose a screen for checking out of the subscriber premises (room) using the terminal.

Couch discloses an automated check-out service at the subscriber's premises (the lodging facility) (see Column 3, Lines 30-33 and Column 6, Lines 5-19 and Figure 5).

It would have been obvious to a person of ordinary skill in the art to modify the screens provided by Welsh, Kirschner and Boulton, using the automated check-out system, as taught by Couch, for the purpose of reducing labor cost for the lodging facility and the possibility for human mistake (see Column 3, Lines 45-48 of Couch).

Referring to claim 42, see the rejection of claim 37.

7. Claims 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh (U.S. Patent No. 4,829,558) in view of Boulton (U.S. Patent No. 4,985,697).

Referring to claim 53, Welsh discloses providing a plurality of two-way terminals (see Figure 1 for homes 9, which all contain terminal 13).

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Welsh also discloses generating at the premises of a subscriber a screen for display on a television, wherein the screen relates to information about services provided by the subscriber of the interactive entertainment system (see Column 4, Lines 53-56 for generating (at an FM station) and displaying (on a television) screens and Column 4, Lines 42-46 for the system providing home shopping services), and wherein the services for selection are offered by an interactive entertainment system (see FM broadcast station 5 in Figure 1, which provides the screen data to the terminals at Column 4, Lines 53-56). The examiner notes that since the FM broadcast station 5 in Figure 1 is sending the interactive screens (users can respond to the screens) to the users in there homes, the FM broadcast station 5 is therefore, an interactive entertainment system.

Welsh also discloses receiving a selection from a guest (see Column 9, Lines 20-24).

The examiner notes that the subscriber responds to a questionnaire at Column 11, Lines 5-25, which is used by the central computer. Therefore the subscriber provides the service of a viewer response system in response to the screen, which relates to information about services (response system) provided by the subscriber (by answering the questions).

Welsh further discloses saving a screen of the plurality of screens to memory (see Column 10, Lines 3-5 for storing a screen in memory).

Welsh further discloses determining whether the screen of the plurality of screens saved into memory is directly accessible or accessible only through other screens (see Column 10, Lines 19-21 for determining to display other screens that are accessible from another screen according to the responses entered by the viewer).

Welsh also discloses that if the screen of the plurality of screens is saved into memory is only accessible through other screens, then indicating to access the other screen and display the screen on the television (see again Column 10, 19-21 for displaying other screens after a previous screen is displayed).

Welsh however does not teach the memory management method of determining if a screen is part of a group of screens, and only saving the group of screens in RAM so that they may be directly accessed instead of continuously downloading the screens from a remote system.

Boulton discloses receiving screen data and continuously updating the memory depending on the position of the current page being read, where the memory is capable of storing 10-30 pages that are linked to 3-10 pages that have already been viewed (see Column 7, Lines 8-12), thereby teaching that if the screen of the plurality of screens saved into memory is only accessible through other screens, instructing the terminal to indicate that the screen of the plurality of screens saved into memory is not to be deleted from memory.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the functionality of storing screens to

RAM, as taught by Welsh and Reiter, using the memory management functionality, as taught by Boulton, for the purpose of providing the user with rapid access to any one of the modality streams without incurring delays, while maximizing the amount of information immediately available in the current modality stream (see Column 8, Lines 14-18 of Boulton).

Referring to claim 54, see rejection of claim 53 and note that Welsh discloses receiving content (television programs) as well as screens (see Column 8, Lines 20-24).

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 26, 2005